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AUTHOR Ashby, Dianne; Hecht, Jeffrey B.; Klass, Patricia H.
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ABSTRACT

This paper examines the external and local responses that are forcing university programs in educational administration to consider distance education, as well as the responses of one particular program, the Department of Educational Administration and Foundations at Illinois State University (ISU). Specifically addressed are external pressures related to changing standards for school administrators and competition for program delivery. Local responses include increased involvement in (as well as resistance to) the use of technology by students, teachers, and administrators. Concerns and problems experienced by students, administrators, and faculty in the ISU program are discussed. The paper concludes that distance education is an alternative modality for reaching students that must be considered and implemented in some form, but that it requires institutional, faculty, and student commitment. An attached chart compares the recommended technology/research skills of Illinois principals as stated by several organizations of educational administrators. (Contains 16 references.) (DB)

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Running head: IMPLICATIONS OF DISTANCE EDUCATION

Implications of Distance-Education for Educational Administration Programs

Dianne Ashby
Jeffrey B. Hecht
Patricia H. Klass

Department of Educational Administration and Foundations
Campus Box 5900
Illinois State University
Normal, Illinois 61790-5900
deasby@ilstu.edu
jbhecht@ilstu.edu
phklass@ilstu.edu

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Abstract

This paper addresses the external pressures that are forcing educational administration programs to consider distance education as well the local responses by one educational administration program. The external pressures discussed include the changing standards for school administrators and the new competition for program delivery. The responses include those of the department's administration, faculty, and students.

Implications of Distance-Education for Educational Administration Programs

Pressures to teach about and use various administrative and instructional technologies are impacting the curricula of Departments of Educational Administration. These pressures come primarily from two sources: external standards for performance of school leaders, and threat of competition in the delivery of graduate programs for administrator certification. Recent changes in certification requirements are requiring school administrators to be able to use, evaluate, and apply technology. In turn, educational administration programs have had to change curriculum and provide training for their own faculty so they can teach prospective school administrators.

Educational administration programs have also had to respond to pressures of competition created by the advances in technology such as the Internet and Distance Education initiatives. Educational administration departments have probably had the most experience teaching non-traditional students than most other units of the university. However, the focus has shifted from evening, weekend, correspondence, and independent-study courses with the advent of the Internet. In the past, programs could either dictate times and schedules for students within a one- or two-hour radius from campus, but with the decentralization push by state agencies and competition from private and other public institutions, programs cannot assume their traditional market is safe.

This has resulted in an increasing number of outreach courses having been created. Yet, having faculty drive two-to-three hours one way each week for courses poses problems for departments. The potential benefits of distance education technologies such as the Internet, videoconferencing, and interactive television have finally seemed to outweigh the financial and technological costs that were so prohibitive in the past. The additional benefit of meeting certification demands from state and professional organizations has propelled educational administration programs into seriously investigating and investing in distance education.

Program administrators have tended to focus on the infrastructure and efficiency of distance education. Instructors have had different, yet equally serious, concerns: "Can students learn effectively in these environments, and, if yes, how do instructors create effective research methods course?" Recent research has emerged that evaluated specific programs or experiences (Thomas, Carswell, & Price, 1998). Hillesheim (1998) identified three types of barriers to learning and strategies to counteract them in distance education. The areas relate to student, faculty, and technology. In all areas, prior preparation and training are crucial as is the integration of the administrative and instructional infrastructures. Despite the growth of interest in this area and the increasing literature base, the problem is "there are no standards and few guidelines to help either learners or teacher as they plan their programs. However, there is clear enthusiasm" (Herther, 1997, p. 63). Milstein and Krueger (1997) noted "Readiness for program change requires several realities. First, there must be a belief that things should be done differently and better, which means a general sense of doubt about the effectiveness of current practices has to exist" (p. 100).

As one educational administration program consisting of enthusiastic faculty, we tried to assess our administrative role, our students' learning, and our teaching as we adapt to the changing educational environment. This paper addresses the external pressures that are forcing

educational administration programs like our own to change. The external pressures discussed are the changing standards for school administrators and the new competition for program delivery. We present our own responses to these pressures, and some of the thinking that went into the creation of these responses. The responses include those of our department's administration, faculty, and students.

External Pressures

Standards for School Administrators

The pressures for administrators to acquire knowledge, skills, and even values associated with the use of technologies in schools originate from several significant sources. National standards for administrator performance and the university programs that prepare them feature requirements related to technology. One of the first publications presenting a set of proposed national standards for school administrators was the 1993 Principals for Our Changing Schools by the National Policy Board, a consortium of 10 professional associations concerned with schools and school leadership. The National Policy Board identified 21 domains across four categories (Functional, Programmatic, Interpersonal, and Contextual) in which school leaders should be competent. Knowledge and skills and values toward technology are embedded in many of those domains. For example, performance standards within domains include using technologies to organize and analyze information, employing technical procedures such as spreadsheets, and evaluating communication technologies.

New standards established by the Interstate School Leadership Licensure Consortium (ISLLC) and the National Association for Accreditation of Teacher Education (NCATE) and its associated professional associations focusing on school leadership (Educational Leadership Constituent Council - ELCC), have begun to influence the licensure of school leaders in at least 27 states, shaping the redesign of school leadership preparation programs across the United States. Three of the six ISSLC standards require school leaders to have knowledge of and demonstrate performance associated with technologies. Standard 1 requires administrators to have knowledge of information sources and data collection and analysis. Standard 2 calls for knowledge of the role of technology in student learning and in professional growth and identifies one criterion for successful performance of this standard as use of technologies in the school for teaching and learning. Standard 3 refers to knowledge of current technologies that support management functions. These ISSLC standards are being adopted with minimal adaptations by state education agencies as the basis of new certification standards. Adoption and adaptation of these standards include new means of evaluating readiness of applicants for administrator certification, including consideration of performance assessments in the form of portfolios, essay tests requiring reaction to scenarios, and actual observation of performance. A parallel group, the Interstate New Teacher Assessment and Support Consortium (INTASC), has developed and disseminated an even more complex set of standards and performances for teachers on which several states have based new requirements for teacher certification. The development of standards for certification of teachers and administrators that include more than acquaintance with instructional and administrative technologies makes it unlikely such standards will fade; more likely they will become even more complex and prescriptive.

Administrator preparation programs are certainly impacted by state education agencies adoption and adaptation of the ISLLC standards (see Table 1). At the same time, preparation programs invested in accreditation by NCATE are confronted with a complex set of guidelines and performances adopted in 1995 that preparation programs and their graduates must meet (nine guideline areas, more than 60 performance items). One of the nine guidelines focuses specifically on technology and information systems. According to these guidelines, administrators must be able to use technologies to enrich curriculum and instruction, apply and assess technologies for business and management purposes, and develop long range plans regarding administrative and instructional technologies, staff development, and impact of technologies on student outcomes and organizational operations. Specifically, they must be able to use a variety of on-line, off-line, and distance education technologies. As Cooley (1998) exhorted, "Prepare administrators for their new roles. More than any other employee, the school principal is the key to adoption and use of technology by faculty and staff" (p. 353).

Competition for Program Delivery

The much publicized establishment of Western Governor's University and other Internet based systems for delivery of higher education and adult continuing education associated with a variety of fields and professions has the attention of traditional universities and their professors. A number of entrepreneurial professors see the birth of these organizations as an opportunity to sell their expertise and time in the form of on-line versions of their courses to a number of buyers. In some cases, this has led to arguments about whether course content belongs to a professor or to the professor's university. Many traditional universities are countering the competition with their own on-line courses, programs, and consortia arrangements. Competition for the preparation of school administrators in this information age comes not only from other universities who are no longer limited in their reach by assigned geographic boundaries and by up-start virtual universities, but also by the professional associations' Departments of Educational Administration (and their students support). A coalition of the American Association of School Administrators (AASA), the National Association of Elementary School Principals (NAESP), and the National Association of Secondary School Administrators (NASSP), called the Administrator Certification Coalition (ACC), proposes to develop a curriculum aimed at potential administrators that consists of a combination of face-to-face seminars and virtual classrooms. The ACC's vision includes both masters and doctorate degrees (Schneider, 1998).

Local Response

External forces of standards related to the quality of programs and their graduates and competition for customers have led some traditional programs to extensively experiment with their curriculum, and with their delivery systems addressing students taking courses on-campus and at locations distant from the home campus.

Students

Schoolteachers and administrators are increasingly confronted with exhortations to become involved with technology. Even as they read practice-based journals, attend professional conferences, and work with vendors and local experts to install instructional and administrative

technologies in schools, teachers and administrators have found they are making decisions for which they are ill equipped (Ross, 1996). For most, frustration is based in their own experiences growing up in a world in which the microchip did not exist. Many administrators are playing a losing game of catch-up, unlike today's high school students whose understanding and use of technology is naturally acquired through regular use and curiosity. Except for a few who have found ways to devote significant time to learning about and experimenting with emerging technologies, most are making decisions with very little confidence in their capacities to do so. These teachers and administrators in graduate school for initial and advanced administrator certification are currently the types of students our Educational Administration Department serves.

The research methods and statistics classes have historically been the first classes where educational administration students have encountered the required use of technology. Two decades ago is was common for students to enter data using punch cards, then work on mainframe computers to analyze their data. More recently, students analyze data using microcomputers and a wide variety of user-friendly software packages. Over the same 20 years computer demands grew beyond statistical analysis, simulations became available, library resources for research moved online. With the advances in the Internet the entire instructional process can be taught using distance technologies. Research faculty have kept up with these advances and incorporated these new elements into their courses; however, the technology backgrounds of students remains minimal.

The experience of Illinois State's Department of Educational Administration and Foundations has been that technological and distance innovations are often met with resistance, due (in large part) to students' inability (or reluctance) to use technology. As Hillesheim (1998) found, our students have been away from school for a long time, are insecure about their abilities in using technology, need greater feedback and encouragement, they are isolated from other students, and believe the faculty have little in common with them. In addition, the demands from their jobs, families, and community give them little time to devote to learning the technology as well as the course content. One student captured it best when he said:

> Things aren't impossible right now, but the class hasn't even begun yet and I'm feeling overwhelmed. I know you are working as hard as we are, and I know you want us to succeed. I don't know if I am going to be able to handle all the different demands upon my time. You will notice I haven't even mentioned a family life.

These characteristics create barriers in implementing distance education and its related technology. When asked if Internet classes took more time, Kroder, Suess, and Sachs (1998) cited one telling student response, "Yes. Significantly more time was required (2040% more)" (p. 69). This did not differ from the responses of our own students. According to another student,

> I met with [names of classmates deleted] this morning. I sensed quite a bit of frustration there. It's not up to me to talk for others, but I am having trouble trying to do all the labs, videos, and book work that is needed and still do my job. I have spent hours and hours on this class, and I am not sure I get anything concrete accomplished.

Some of the experiences Illinois State students may be unique because their distance education experience was not restricted to the traditional interactive television (ITV) environment. We have experimented both with Internet-based audio and video conferencing programs (CU-SeeMe) with live video streaming via the Internet (Real Video) as the primary medium of communication for instruction. These formats required students to make active use of several, sometimes complicated, computer applications than what is more traditionally associated with an asynchronous web-based class (typically using only a web browser and e-mail).

The faculty provided orientation sessions to prepare students for the new environment in order to alleviate some of the anticipated problems students would have adjusting to distance education. Such an orientation is a common recommendation suggested by others who have initiated similar distance education initiatives (Hillesheim, 1998; Lacina-Gifford & Kher-Durlabhji, 1996). We, and others, found that these orientations should not be limited to student training just before the course begins. As Grisham-Brown, Knoll, and Collins (1998) noted, while video instruction works well for courses that require interaction between instructors and students, "only by systematically requiring interaction can the instructor 'teach' the students to become comfortable with the technology and not fall into patters of passive television viewing" (p. 116).

Students' responses to distance education remain mixed despite the efforts of faculty to model the use of infusing technology into the curriculum, to emphasize the national mandate for administrators to become proficient in technology, and to provide additional technical training. Compared to the experiences reported in the literature of demand from students who would otherwise not be able to obtain a degree, our department has a history of sending faculty over 150 miles one way every week to teach students. Students, understandably, react negatively to distance education in comparison to having a professor willing to visit them. Our department's commitment to increasing the numbers of off-campus sites around the state will, we feel, eventually force change in this historical model.

Departmental Administration

A Department of Educational Administration that takes the external challenges of accreditation and preparation standards and on-line degrees seriously faces significant internal challenges as well. Among these challenges is the need for faculty members to use technology as a new instructional method. The university, by its nature, has historically encouraged the sage on the stage notion of higher education as students (metaphorically) come to the ivory tower to learn from experts in narrowly defined fields. More and more, as the notion of pedagogy and good teaching has crept away from the lecture mode, universities are developing centers for teaching which provide interested professors with a range of instructional strategies designed to more actively engage students.

Departments of Educational Administration must engage faculty in not only teaching students about instructional and administrative technologies, but in the use of these technologies for delivery of instruction. One challenge to doing so is simply the longevity of faculty. A large number of professors of Educational Administration have been professors for 15 (or more) years,

much longer than the need for such technologies in schools and university programs of Educational Administration. Their computer and technology skills are typically out of date and they, like their public school counterparts, are struggling just to catch up.

Another challenge is the specialty nature of the professorship. The few professors who have chosen to specialize in the use of technology for instruction have found ways to integrate their research interests, teaching, and service responsibilities through working on the cutting edge of hardware and software, experimenting in classrooms and with various forms of distance education, presenting and publishing about those experiments, and serving on university committees planning for instructional technologies. Other professors, with interests elsewhere, simply do not have time to develop the expertise necessary to thoughtfully integrating technology into teaching routines.

Departments of Educational Administration must find incentives for developing professors' expertise and for supporting them during the act of instruction. Release time from teaching, summer salaries, sabbaticals, and team-teaching are strategies departments should consider in order to develop in faculty models for practicing administrators and potential administrators regarding appropriate and effective uses of technology. In addition, universities must recognize that professors who must devote time to research in their selected specialties will always need support to develop and deliver instruction using various technologies, particularly technologies associated with synchronous and asynchronous delivery of courses or parts of courses (i.e. review sessions, tests, and on-line chat sessions) via the Internet. Universities (and their colleges and departments) must find ways to make experts in the design and delivery of instruction through technology available to professors, even during class meetings. Without a doubt, integrating technology both as an example to graduate students preparing to be school administrators and as a means of competing with other delivery systems for customers is expensive.

Another challenge is curricular. Curriculum is generally thought of as belonging to individual faculty. It is the individual faculty who must want to make changes. For changes to be genuine, the tension between the official curriculum and the notion of academic freedom must be minimized. This is particularly difficult when standards (such as the national standards) are assigned to each course and professors are limited in their autonomy to define the content and instructional design of courses. This is exacerbated by the monastic nature of the university, where professors seldom consult with each other regarding teaching or interfere with each other's courses. This can be particularly true in departments in which certain professors have perennially taught particular courses.

The traditional preparation program included no requirements related to technology. In some cases, electives in technology were available to students whose schools provided opportunities to use those skills. Review of the difference between the National Policy Board's 1993 standards and the standards they prepared for NCATE in 1995 reveals a number of new performances related to technology in just two years. This rapid change in the technologies available has yet to be reflected in a large number, perhaps a majority, of schools. Despite rapid growth of technologies for work and leisure, home and office, many schools have one computer on-line, administrators who do not even word process, and teachers who do not have regular

access to a computer either at home or at school. Preparation programs, required to teach a number of technology-related content and skills, are faced with a population of adult students whose technological experiences vary widely and whose desire and/or perceived need-to-know varies just as much.

The limitations of graduate education, traditions of certification and the current application of program accreditation guidelines exacerbate the curricular challenge. Graduate education is still measured primarily in courses and credit hours. Notions of how many courses and hours will be tolerated in a graduate program, certification requirements, and the hours and courses in competing programs limit the flexibility of departments. It becomes difficult, if not outright impossible, to add new content within courses or to adopt new courses without abandoning content sacred to someone (possibly even a respected member of the department). Despite the emphasis on student outcomes, NCATE reviewers have been known to be skeptical of the ability of professors to teach and demonstrate technology skills within content courses and prefer to see, instead, at least one course focusing on the prescribed technologies and associated student performances. Yet both common sense and research experience have demonstrated that technology must be integrated into day-to-day concerns to be truly useful and understood.

Faculty

Faculty need to respond to the changing standards and demand by students who live at a distance from campus by modifying their curriculum and classroom delivery options. Our research methodology faculty worked with our K-12 administration faculty to modify the existing research methodology course to incorporate appropriate data analysis and technology components into the syllabus specifically in response to the changing national and standards. The introductory research course, just as other required courses for administration certification, noted the relevant NCATE guidelines and performance assessment activities.

One problem identified with this effort has been the contradictory demands by different professional organizations for the multiple constituents served in the introductory research classes. Not only do the introductory research courses serve preservice K-12 administrators but also master's student in reading, mathematics education, curriculum and instruction, and special education. Each professional organization is now establishing guidelines similar to NCATE; the challenge will be to teach these multiple groups while avoiding the balkanization of the curriculum into "research methods for [fill in your specialization]."

Additional consideration is needed for distance education research classes. Depending on the type of distance education delivery method, different class activities, assignments, and materials need to be developed. The instructors involved in this study found they had to drastically revamp course materials and class activities they used in their traditional classes. One should not count on making only minor revisions to an existing course. As one colleague noted, she found it easier to teach a totally new preparation using distance education than to modify an existing course because she had no preconceived notions about how the course was "supposed to" progress. Freddolino (1996) noted that one should focus on relationships: to the department, students at the local sites, and with the technology as one develops a distance education course. Although most faculty know they must devote more time and energy to technical aspects of

planning and delivery, time spent consciously on building relationships with students and the structures/personnel that support distance education will be well worth it.

Once the considerations above are addressed by faculty, the technical difficulties related to teaching classes that traditionally have a computer laboratory component or on-site library research component need to be addressed. The creation of CD-ROM multi-media tutorials that demonstrated computer and library applications was one attempted solution. However, the efficiency of providing a common computer laboratory time where student questions and problems could be addressed simultaneously was lost. Instead, individual correspondence to answer students' questions was required. This individualization was offset, somewhat, by students' naturally forming their own study groups. Then correspondence would come from one student for the group. A recent student email demonstrates student reliance on their peers instead of the instructor (a positive outcome from this faculty member's perspective!):

> We all met in the quad cities on Friday to work on lab 4. I found it very helpful. I just want you to know that Stu stayed and helped me with lab 2. We had it all done and lost it! I just wanted you to know that I'm still trying. Believe me, I'm going to get it done!

The last consideration faculty need to contemplate before moving to distance education is their personal preferences, strengths, and weaknesses. Do you hate checking, and responding to, e-mail several times each day? Then reconsider distance education. Do you have a low tolerance for instability, disruption, or unplanned events? Then reconsider distance education. Are you aversive to risk-taking? Then reconsider distance education. One instructor in this project found that the most disconcerting factor involved with distance education was the lack of ability to anticipate timing, student reactions, and what would work under the new conditions for learning. An experienced faculty found herself in the role of a beginning first-time instructor! Think back to your first time teaching---simultaneously over-and under-preparing, experiencing extreme high and low mood swings in reaction to each and every class, rethinking what it means to teach and for students to learn. In short, devoting extraordinary amounts of physical, emotional, and conceptual energy on your classes. While this has been the initial experiences of one instructor, the memory of subsequent semesters when mastery finally was achieved provided the impetus to continue the commitment to distance education.

Summary

Change is never an easy process, especially in higher education which has been particularly noted for its reticence to adopt new patterns and structures of operation. Change, however, it coming, whether we like it or not. Legislatures and professional associations are both creating new paths and alternatives for those seeking careers in educational administration. Consortia of colleges pursuing technological alternatives, along with new for-profit schools and corporations, are competing with traditional institutions for student attention, attendance, and tuition. Students themselves are becoming more savvy consumers of education, demanding more from their instructors and institutions. For many, budgets continue to shrink, requiring that we do more with fewer staff, older hardware and facilities, and less reward.

There will always be a place for the undergraduate, residential program. These full time programs serve as a rite of passage, a time of social and emotional development, in addition to whatever education these young adults absorb. The last few years have shown, however, an increase in the numbers of older, working adults pursuing both basic and advanced degrees. These students tend to be more skill and practical oriented. They have less time than the traditional on-campus student to devote to theoretical, learned inquiry, and are generally more interested in learning specifically what they need to know to either advance in their current career or to move to a new one. They want to succeed, but have many other pressures on their lives: families, jobs, and busy social lives. They are also more sophisticated in pursuing their higher education goals, and are more willing to adopt non-traditional alternatives if it reduces the impact in their established lifestyles.

Distance education is not the cure, the panacea, for all of the ills that are impacting departments of educational administration. It is, however, an alternative modality for reaching students that we must seriously consider and begin to implement in some form. Moving from more traditional modes of instruction to distance education, whether in part or in whole, requires three key elements from the institution. The first is a commitment from the institution to value and support distance education efforts. No faculty, nor student, will undertake the risk of a distance education class unless the necessary infrastructure, support systems and personnel, and ethos are in place. The second is a commitment from faculty, a willingness to invest the time and personal energy it takes to rethink, retool, and recreate one's area of expertise. All faculty, not just the technologically literate, will need to be cajoled, prodded, encouraged, and rewarded for this undertaking, lest we evolve into a system of technological haves and have-nots. Finally, the third commitment comes from students, whose voice in the type and kind of educational product we offer is much louder and clearer than ever before. Students must become partners in developing, testing, evaluating, and adopting alternative modes of delivery. They must not been seen as the problem needing to be solved, but rather as an integral part of creating new and exciting ways of teaching and learning.

Our experiences have shown us that education at a distance, in many different forms, can be successful. We are far from being experts at it, nor do we claim to fully understand how each alternative ought to be either conceptualized or operationalized. We are learning, experimenting, reflecting, and trying again, in a concerted effort to get ahead of the current rather than to be just carried along in its flow. It has been risky, and there have been less-than-positive experiences along the way. But without a willingness to take the risks we would be like the ostrich with his head stuck in the sand.

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Table 1

Selected Technology/Research Skills Required for Illinois Principals

Knowledge/Performances for Initial Licensure	NCATE	ISLLC	NAESP
Standard 1: Facilitating a Vision of Learning			
A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community			
The principal has knowledge and understanding of:			
1 D. Information sources, data collection, and data analysis strategies: Conduct needs assessment Use qualitative and quantitative data to plan and assess school programs Analyze and interpret educational data, issues, and trends	2.1 2.2 2.4	Knowledge 1-4, 2-6, 4-1 Performance 1-10, 1-11, 2-24, 2-25, 2-27, 3-11, 5-12, 6-2	3 8
Standard 1: Knowledge/Performance for Continuing Licensure			
The principal facilitates processes and engages in activities ensuring that:			
Data related to student learning are used to develop the school mission and goals	2.2 2.3		
Relevant demographic data pertaining to students and their families are used in developing the school mission and goals	2.2 2.3		
Standard 2: School Culture and Instructional Program			
A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.			
The principal has knowledge and understanding of:			
2 H. measurement, evaluation, and assessment strategies. Use qualitative and quantitative data to plan and assess school program. Assess student progress using a variety of appropriate techniques	2.2 2.3	Knowledge 1.4, 2.6 Performances 1.10, 2-13, 2-15, 2-17, 3-3	8
2 K. The change process for systems, organization, and individuals. Conduct needs assessment. Use qualitative and quantitative data to plan and	1.4 2.1 2.2 2.3	Knowledge 1.3, 1.4, 2.6, 2-9, 3-1, 3-2, 4-1, 6-5	4 9 11

Knowledge/Performances for Initial Licensure	NCATE	ISLLC	NAESP
assess school program Do a study of current best practices and relevant research and demographic data, and analyze their implications for school improvement.		Performances 1.10, 1-11, 1-12, 2-14, 2-15,k 2-17, 3-1, 3-2, 3-3, 3-12, 5-12 Disposition 1-7, 3-1	
2 L. the role of technology in promoting student learning and professional growth. Use technology, telecommunications and information systems to enrich curriculum and instruction. Develop long-range plans for school and district technology and information systems	9.1 9.3	Knowledge 2-10, 3-8 Performances 3-19	3 6
Standard 2 Knowledge/Performance for Continuing Licensure			
The principal facilitates processes and engages in activities ensuring that:			
Appropriate technologies are used in teaching and learning	3.1, 3.2		
Multiple sources of information are sued to make decisions	2.1, 2.2, 2.3		
Multiple sources of data regarding performance are used by staff and students	2.1, 2,2.2.3		
Standard 3: Management **A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe,**			
The principal has knowledge and understanding of			
3 H. current technologies which support management functions. Apply and assess current technologies for school management and business procedures.	9.2	Knowledge 3-8 Performances 3-19	
Standard 3 Knowledge/Performance for Continuing Licensure			
The principal facilitates processes and engages in activities ensuring that:			
Knowledge of learning, teaching, and student development is used to make management decisions	1.1, 2.1, 2.2, 3.3, 5.1		
Emerging trends are recognized, studied, and applied as appropriate	1.4, 2.1, 2.2, 2.3, 2.4		

Knowledge/Performances for Initial Licensure	**NCATE**	**ISLLC**	**NAESP**
Effective problem-framing and problem-solving skills are used	1.3		
There is effective use of technology to manage school operations	*9.2, 93.*		
Standard 4: Collaboration with Families and Communities **A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources** The principal has knowledge and understanding of:			
	2.1	Knowledge	5
4 A. emerging issues and trends that potential impact the school community		4-1	11
Conduct a needs assessment		Performances 1-1, 2-14, 5-12	